

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	0.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/807,722		03/24/2004	Jinichi Hiyama	44471/298741	4425	
23370	7590	08/24/2005		EXAMINER		
	PRATT,		. DUONG	DUONG, THO V		
	CHTREE S	CKTON, LLP STREET		ART UNIT	PAPER NUMBER	
ATLANT	A, GA 30)309		3743	3743	
				DATE MAILED: 08/24/200	DATE MAILED: 08/24/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summan	10/807,722	HIYAMA ET AL.					
Office Action Summary	Examiner	Art Unit					
	Tho v. Duong	3743					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 06 Ju	ıne 2005.						
· _ · · ·	action is non-final.						
3) Since this application is in condition for allowar	, _						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4a) Of the above claim(s) 7-9 is/are withdrawn	 ✓ Claim(s) 2,4,5 and 7-10 is/are pending in the application. 4a) Of the above claim(s) 7-9 is/are withdrawn from consideration. 						
5) Claim(s) is/are allowed.							
6) Claim(s) 2,4,5 and 10 is/are rejected.							
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	r election requirement						
· — · · · · · · · · · · · · · · · · · ·							
Application Papers	r						
	P) ☐ The specification is objected to by the Examiner. D) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct	-, ,	, ,					
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).					
1. Certified copies of the priority documents	s have been received.						
2. Certified copies of the priority documents	s have been received in Applicati	on No					
 Copies of the certified copies of the prior application from the International Bureau 	-	ed in this National Stage					
* See the attached detailed Office action for a list	·	ed.					
	•						
Attachment(s)							
Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date	6) Other:						

DETAILED ACTION

Receipt of applicant's amendment filed 6/6/2005 is acknowledged. Claims 2,4-5 and 7-10 are pending. Claims 7-9 remain withdrawn from further consideration.

Response to Arguments

Applicant's arguments filed 6/6/2005 have been fully considered but they are not persuasive. Applicant's argument that both Bertva and Calleson fail to disclose the length of the main body portion (41) does not exceed the length of the first separated body, has been very carefully considered but is not deemed to be persuasive. The examiner agrees only that the length of the second separated body of both the references exceed the length of the first separated body. However, the main body (48) in Bertva and (190) in Calleson does not exceed the length of the first separated body in both references. In fact, the length of the main body is the length of the second body but excludes the abutment portion (140), and the projections portions. Therefore, the rejection against claims 2,4,5 and 10 still remain proper.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Bertva et al. (US 5,450,896). Bertva discloses (figures 1-4) a header tank for a heat exchanger in which a

Art Unit: 3743

plurality of flat tubes (14) are communicated and connected to at least a pair of header tanks so as to form a multiple stages, comprising a pipe (12) formed by combining a first separated body (26) and a second separated body (28); a closing member (22) for closing opening portions in both end of the pipe; a tube holding wall portion (32) provided in the first separated body and holds the flat tube; a pair of straight portions (38) protruded from the tube holding wall portion in an approximately orthogonal direction and formed along both ends in a width direction of the tube; wherein the holding wall portion (32) and the pair of straight portions are formed in a Cshaped cross sectional shape; the second separated body further comprises a main body portion (48) closing an opening portion of the first separated body, abutment portions (70) provided in both ends of the main body portions and abutted on the leading end surface of the straight portion in the first separated body; joint projections (54) protruded from the main body portion and bonded to the inner peripheral surface of the leading end portion in the straight portion; wherein the main body portion is formed by connecting the abutment portions to each other in an approximately linear shape so as to be approximately orthogonal to the longitudinal direction of the tube; and the length of the main body portion (48) does not exceed the length of the first body.

Claims 2,4,5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Calleson (US 5,152,339). Calleson discloses (figures 4,7-8) the claimed invention wherein the first separated body (152) includes a tube holding wall portion (154) having insertion holes (170) for holding flat tubes (112) and a pair of straight portion (152) protruded from the tube holding wall portion in an approximately parallel direction to an insertion direction of the flat tubes; the flat tube holding wall portion and the straight portions are formed in a C-shaped cross sectional

Art Unit: 3743

shape; wherein the second separated body includes a main body (190) closing an opening portion of the first separated body, abutment portions (140,144) provided in both end of the main body portion and abutted on leading end surfaces (164) of the straight portions, and joint projections (projections next to abutment portion 144) protruded from the main body portion (190) and bonded to inner peripheral surfaces of leading end portions of the straight portion; and the length of the main body portion in a direction orthogonal to the insertion direction of the flat tube does not exceed the length of the first separated body; the leading end portion of the straight portion are accommodated in a space defined by the joint projection and the abutment portions; the main body portion (190) is in an approximately linear shape so as to be approximately orthogonal to the longitudinal direction of the tube; the inner peripheral surface of the main body portion is formed in a circular curved surface connecting the pair of joint projections to each other.

Regarding claim 2, Calleson further discloses an embodiment in figure 4a that the tube holding wall portion (154) is formed in a flat shape, which is orthogonal to a longitudinal direction of the tube (112).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 3743

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennet can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tho v Duong Primary Examiner

Art Unit 3743

12

August 19, 2005